

Pursuant to the authority vested in the California Air Resources Board by Health and Safety Code Division 26, Part 5, Chapters 1 and 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

IT IS ORDERED AND RESOLVED: The engines and emission control systems produced by the manufacturer as described below are certified for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

Model Year	Engine Family	Combustion Cycle	Fuel Operation	Fuel Type(s)	Engine Operation
2024	RDICL02.4LEA	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems	Special Features
[1]: Exhaust Gas Recirculation (EGR), Diesel Oxidation Catalyst (DOC), Electronic Direct Injection (DFI), Turbocharger (TC), Charge Air Cooler (CAC), Electronic Control Module (ECM)	None

The certified engine models are attached.

The listed engine models comply with the following: 1) emission standard limits (STD) and Not-To-Exceed (NTE) limits, as applicable, for criteria pollutants non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM), and for smoke opacity as demonstrated during the Acceleration (ACL) and Lugging (LUG) modes, and the peak value (PEAK) in either mode of the Smoke Opacity cycle, as set forth in 13 CCR 2423 and the applicable California test procedures for off-road compression-ignition engines, and 2) family emission limits (FEL) declared by the manufacturer as allowed by the applicable California test procedures, stated in units of gram per kilowatt-hour (g/kW-hr) and percent opacity (%opacity), respectively, except as noted, or designated as not applicable (*).

Applicable Standard		Criteria			Smoke Opacity		
		NMHC+NOx	CO	PM	ACL	LUG	PEAK
Tier 4 Final 37 ≤ kW < 56	STD	4.7	5.0	0.03	*	*	*
	FEL	*	*	*	*	*	*
	NTE	5.9	6.2	0.04	*	*	*

BE IT FURTHER RESOLVED: Any declared FEL is the emission limit to which all engines must comply in lieu of the standard limit for certification purposes, subject to the restrictions of averaging, banking, or trading (ABT) programs allowed by the applicable California test procedures.

BE IT FURTHER RESOLVED: That the manufacturer has elected to combine engines from the 19 ≤ kW < 56 power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the 37 ≤ kW < 56 power category in accordance with Section 1039.230(e) of the applicable California test procedures.

BE IT FURTHER RESOLVED: For the listed engine models, the manufacturer has submitted materials to demonstrate certification compliance with 13 CCR 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control warranty).

BE IT FURTHER RESOLVED: The listed engine models may only be installed in or on equipment such that engine operation is consistent with off-road compression-ignition engines as defined in 13 CCR 2421(a)(39).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed on this 12th day of December 2023.



Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RDICL02.4LEA EO Number: U-R-019-0214 Date Applicable: 11/17/2023

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	L	kW	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	-
DL02-LEL05	D24NAP	N/A	I4	2.392	55.4	2600	51.4	280	1600	63.1	1	N/A	N/A
DL02-LEL00	D24NAP	N/A	I4	2.392	55.2	2600	48.8	280	1800	61.1	1	N/A	N/A
DL02-LEL01	D24NAP	N/A	I4	2.392	49.2	2600	43.7	245	1800	53.8	1	N/A	N/A
DL02-LEL02	D24NAP	N/A	I4	2.392	45.5	2600	41.0	225	1800	49.5	1	N/A	N/A
DL02-LEL03	D24NAP	N/A	I4	2.392	36.6	2600	34.3	175	1800	39.1	1	N/A	N/A
DL02-LEL04	D24NAP	N/A	I4	2.392	45.5	2600	41.0	225	1800	49.5	1	N/A	N/A
DL02-LEU00	D24NAP	N/A	I4	2.392	45.5	2600	41.0	225	1800	49.5	1	N/A	N/A
DL02-LEE00	D24NAP	N/A	I4	2.392	36.6	2200	37.3	205	1600	44.9	1	N/A	N/A
DL02-LEE01	D24NAP	N/A	I4	2.392	31.3	2200	32.7	150	1600	34.7	1	N/A	N/A
DL02-LEF00	D24NAP	N/A	I4	2.392	45.6	2200	45.3	262	1600	56.8	1	N/A	N/A
DL02-LEG00	D24PP	51 kW	I4	2.392	51	1800	60.0	268	1800	60.0	1	N/A	N/A
DL02-LEG00	D24PP	42 kW	I4	2.392	42	1500	57.9	267	1500	57.9	1	N/A	N/A
DL02-LEG01	D24PP	51 kW	I4	2.392	51	1800	60.0	268	1800	60.0	1	N/A	N/A
DL02-LEG01	D24PP	42 kW	I4	2.392	42	1500	57.9	267	1500	57.9	1	N/A	N/A
DL02-LER02	D24NAP	N/A	I4	2.392	55.2	2600	48.8	280	1800	61.1	1	N/A	N/A
DL02-LER03	D24NAP	N/A	I4	2.392	49.2	2600	43.7	245	1800	53.8	1	N/A	N/A
DL02-LER04	D24NAP	N/A	I4	2.392	45.5	2600	41	225	1800	49.5	1	N/A	N/A
DL02-LER05	D24NAP	N/A	I4	2.392	36.6	2600	34.3	175	1800	39.1	1	N/A	N/A
DL02-LER06	D24NAP	N/A	I4	2.392	53.9	2600	47.3	280	1700	61.1	1	N/A	N/A
DL02-LEE05	D24NAP	N/A	I4	2.392	48.5	2100	49.5	248	1600	53.7	1	N/A	N/A
DL02-LER08	D24NAP	N/A	I4	2.392	53.9	2600	47.3	280	1700	61.1	1	N/A	N/A
DM02-LEL00	DM02P	N/A	I4	2.392	55.2	2600	45.9	280	1800	61.2	1	N/A	N/A
DM02-LEL01	DM02P	N/A	I4	2.392	36.5	2600	32.7	182	1800	39.4	1	N/A	N/A
DM02-LEL02	DM02P	N/A	I4	2.392	50.7	2600	42.4	252	1800	54.9	1	N/A	N/A
DM02-LEL03	DM02P	N/A	I4	2.392	45.5	2600	37.8	227	1800	48.3	1	N/A	N/A
DM02-LEE00	DM02P	N/A	I4	2.392	48.5	2100	48.4	248	1600	54.1	1	N/A	N/A
DM02-LEU00	DM02P	N/A	I4	2.392	45.5	2600	37.8	227	1800	48.3	1	N/A	N/A
DM02-LEL04	DM02P	N/A	I4	2.392	50.7	2600	42.4	252	1800	54.9	1	N/A	N/A
DM02-LEL05	DM02P	N/A	I4	2.392	41.0	2600	35.7	204	1800	44.4	1	N/A	N/A
DM02-LEL06	DM02P	N/A	I4	2.392	50.7	2600	42.4	252	1800	54.9	1	N/A	N/A
DM02-LEG00	DM02PP	50 kW	I4	2.392	50	1800	57.1	265	1800	57.1	1	N/A	N/A
DM02-LEG00	DM02PP	42.1 kW	I4	2.392	42.1	1500	58.4	268	1500	58.4	1	N/A	N/A
DM02-LEP00	DM02P	N/A	I4	2.392	55.2	2600	45.9	280	1800	61.2	1	N/A	N/A
DM02-LEP01	DM02P	N/A	I4	2.392	50.7	2600	42.4	252	1800	54.9	1	N/A	N/A
DM02-LEP02	DM02P	N/A	I4	2.392	41.0	2600	35.7	204	1800	44.4	1	N/A	N/A
DM02-LEP03	DM02P	N/A	I4	2.392	36.5	2600	32.7	182	1800	39.4	1	N/A	N/A
DM02-LEF00	DM02P	N/A	I4	2.392	55.2	2500	47.7	250	1600	55.0	1	N/A	N/A
DM02-LEF02	DM02P	N/A	I4	2.392	48.2	2600	43.5	214	1600	47.2	1	N/A	N/A
DM02-LEL07	DM02P	N/A	I4	2.392	41	2600	35.7	204	1800	44.4	1	N/A	N/A
DM02-LEE20	DM02P	N/A	I4	2.392	36.5	2600	32.7	182	1800	39.4	1	N/A	N/A
DM02-LEU20	DM02P	N/A	I4	2.392	36.5	2600	32.7	182	1800	39.4	1	N/A	N/A
DM02-LEL20	DM02P	N/A	I4	2.392	36.5	2600	32.7	182	1800	39.4	1	N/A	N/A

ATTACHMENT: ENGINE MODELS

Family: RDICL02.4LEA EO Number: U-R-019-0214 Date Applicable: 11/17/2023

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	L	kW	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	-
DM02-LEL22	DM02P	N/A	I4	2.392	36.5	2600	32.7	182	1800	39.4	1	N/A	N/A
DM02-LEL08	DM02P	N/A	I4	2.392	41.0	2600	35.7	204	1800	44.4	1	N/A	N/A
DM02-LEE01	DM02P	N/A	I4	2.392	41.0	2200	40.2	190	1600	41.0	1	N/A	N/A
DM02-LEF03	DM02P	N/A	I4	2.392	45.6	2200	41.8	276	1500	58.3	1	N/A	N/A
DM02-LEL09	DM02P	N/A	I4	2.392	52.2	2600	43.7	275	1800	59.9	1	N/A	N/A
DM02-LER00	DM02P	N/A	I4	2.392	36.4	2600	31.7	196.4	1700	42.9	1	N/A	N/A
DM02-LEF01	DM02P	N/A	I4	2.392	54.7	2600	42.8	280	1700	61.3	1	N/A	N/A
DM02-LEF02	DM02P	50.5 kW	I4	2.392	50.5	1800	58.5	268.1	1800	58.5	1	N/A	N/A
DM02-LEF04	DM02P	42.0 kW	I4	2.392	42.0	1500	59.5	267.4	1500	59.5	1	N/A	N/A
DM02-LEA00	DM02P	N/A	I4	2.392	55	2400	51.1	276	1400	63	1	N/A	N/A
DM02-LEA03	DM02P	N/A	I4	2.392	47.8	2400	44.7	260	1400	59.8	1	N/A	N/A
DM02-LEE02	DM02P	N/A	I4	2.392	48.5	2100	48	280	1600	61.2	1	N/A	N/A
DM02-LEF01	DM02P	N/A	I4	2.392	55.2	2500	47.7	250	1600	55.0	1	N/A	N/A
DM02-LEV00	DM02P	N/A	I4	2.392	54.6	2400	48.8	280	1600	61.5	1	N/A	N/A
DM02-LEF11	DM02P	N/A	I4	2.392	48.2	2600	43.5	214	1600	47.2	1	N/A	N/A
DM02-LEE08	DM02P	N/A	I4	2.392	44.3	2300	42.0	260	1600	57.6	1	N/A	N/A
DM02-LEF12	DM02P	N/A	I4	2.392	49.1	2300	44.4	245	1600	52.9	1	N/A	N/A
DM02-LEL11	DM02P	N/A	I4	2.392	55.2	2600	45.9	280	1800	61.2	1	N/A	N/A
DM02-LEF09	DM02P	N/A	I4	2.392	48.2	2200	41.8	214	1600	47.2	1	N/A	N/A
DM02-LEE09	DM02P	N/A	I4	2.392	48.5	2400	43.7	248	1600	54.0	1	N/A	N/A
DM02-LEA20	DM02P	N/A	I4	2.392	41.1	2300	40.3	219	1700	48.9	1	N/A	N/A
DM02-LEA21	DM02P	N/A	I4	2.392	44.8	2300	43.2	238	1700	52.9	1	N/A	N/A
DM02-LEA22	DM02P	N/A	I4	2.392	52.1	2300	49.9	263	1700	58.6	1	N/A	N/A